

BILT-WELL DOUBLE-HUNG WINDOW UNITS

These precision-made windows are twice as weathertight and require only 1/10th the lifting effort of ordinary windows. This is made possible by the patented flexible jamb-liner shown in the section enlarged, and is exclusively Bilt-Well.

Bilt-Well Windows are complete weatherstripped units—sash and frame manufactured in modular sizes, and standardized for various standard walls—brick veneer, solid masonry and wood frame walls.

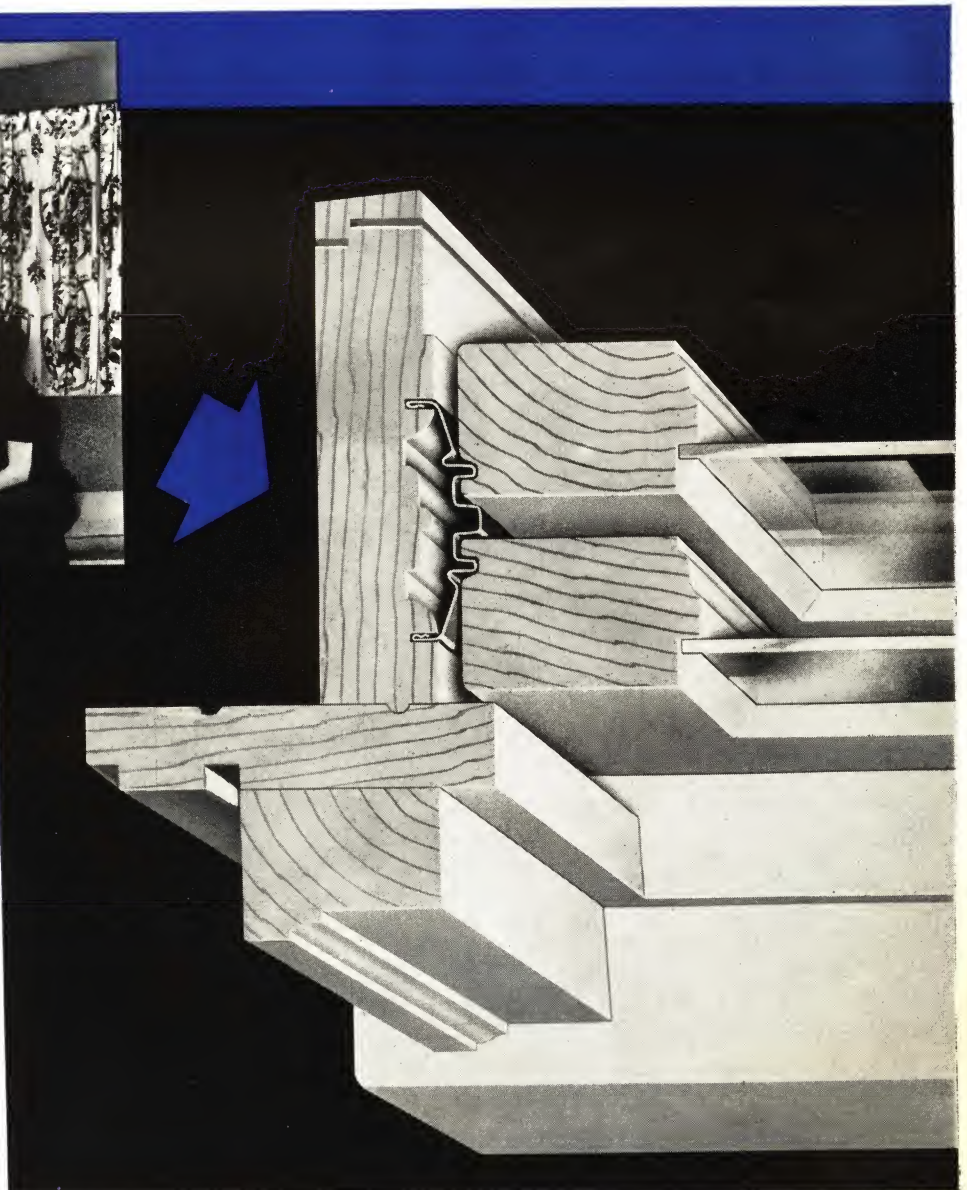
An adaptable blind stop, removable portion of jambs, and removable sill strip make Bilt-Well Double-Hung Windows adjustable to various thicknesses of sheathing, dry-wall or plaster. The flexibility of standardized Bilt-Well Windows is important to Architects and Builders.

Compare Bilt-Well Windows with any window on the market today, point for point, feature for feature, for economy and durability.

Bilt-Well Windows are made of clear kiln-dried Ponderosa Pine—a natural insulator. They are toxic, water repellent treated in strict accordance with National Woodwork Manufacturer's Association standards. The frame is comprised of heavy (1 1/8" thick) jambs and 1 3/8" thick sill. The sash are 1 3/8" thick, prefitted and glazed with a high special quality glazing compound and standard brands of fine quality glass. The sash are counter-balanced with guaranteed overhead spring balances for utmost ease of operation. Bilt-Well Double-Hung Windows are available in all modular sizes, widths from 1'-4" to 3'-8" and heights from 2'-6" to 6'-6" inclusive. Standard designs are shown on the following pages.



Only Bilt-Well Windows have this patented flexible weatherstrip that adjusts with climatic changes, just like the thermostat on your furnace! Minimum friction plus perfect counterbalancing adds up to a Bilt-Well Window that is twice as weathertight with 1/10th the lifting effort of ordinary windows! This patented feature offers savings in fuel, savings in labor on installation, and savings in trouble-free service that eliminates call backs.



CARR, ADAMS & COLLIER COMPANY . Dubuque, Iowa

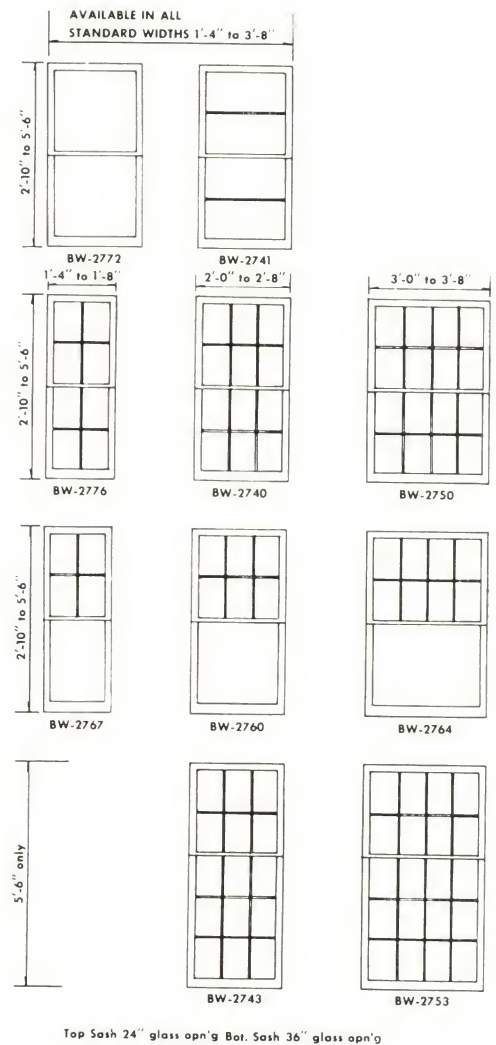
BILT-WELL DOUBLE-HUNG WINDOW UNITS

To an architect, Bilt-Well Windows are all important, first because they are made by experienced, skilled craftsmen whose abilities and "know-how" are real attributes to the modern woodworking industry; and second, because Bilt-Well Windows are offered in stock designs and modular sizes.

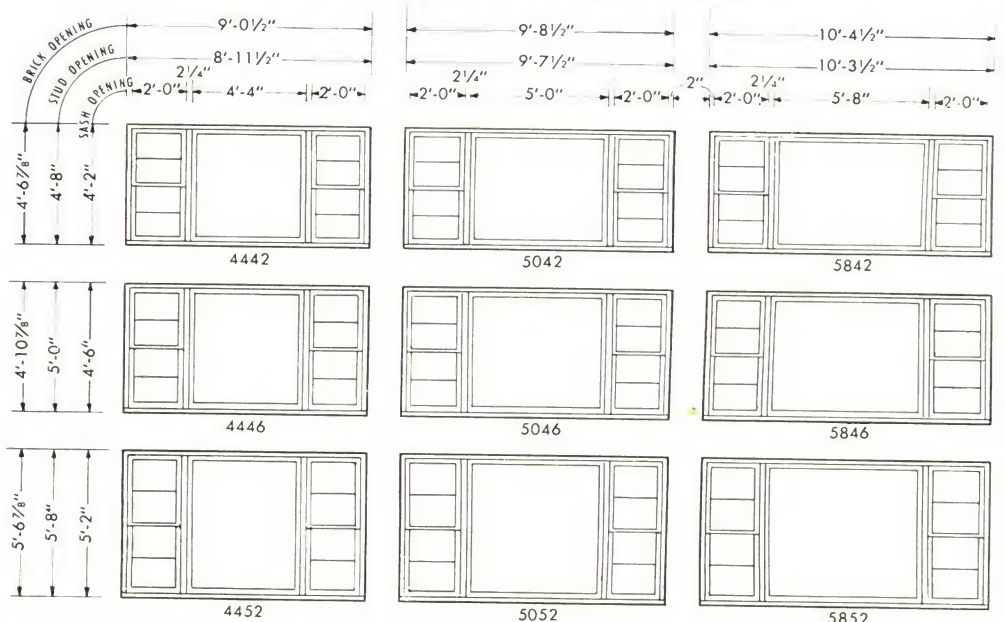
On this page, the stock Bilt-Well Double-Hung window designs are shown.

STANDARD STOCK BILT-WELL DOUBLE-HUNG WINDOW UNIT SIZES

Opening Size	Opening Size	Opening Size	Opening Size
1-4 x 2-6	2-0 x 2-6	2-8 x 2-10	3-4 x 2-10
2-10	2-10	3-2	3-2
3-2	3-2	3-6	3-6
3-6	3-6	3-10	3-10
3-10	3-10	4-2	4-2
4-2	4-2	4-6	4-6
4-6	4-6	4-10	4-10
4-10	4-10	5-2	5-2
5-2	5-2	5-6	5-6
5-6	5-10	6-2	5-10
5-10	6-2	6-6	6-2
	6-6		6-6
1-8 x 3-2	2-4 x 2-6	3-0 x 2-10	3-8 x 3-6
3-6	2-10	3-2	3-10
3-10	3-2	3-6	4-2
4-2	3-6	4-2	4-6
4-6	3-10	4-6	4-10
4-10	4-2	4-10	5-2
5-2	4-6	5-2	5-6
5-6	4-10	5-6	5-10
5-10	5-2	5-10	6-2
6-2	5-6	6-2	6-6
6-6	5-10	6-6	
	6-2		
	6-6		

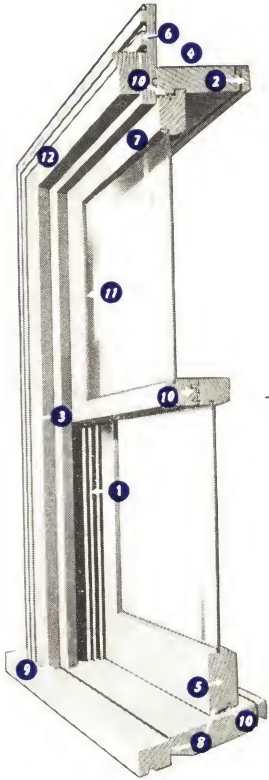


STANDARD BILT-WELL DOUBLE-HUNG WINDOWS WITH CENTER PICTURE SASH



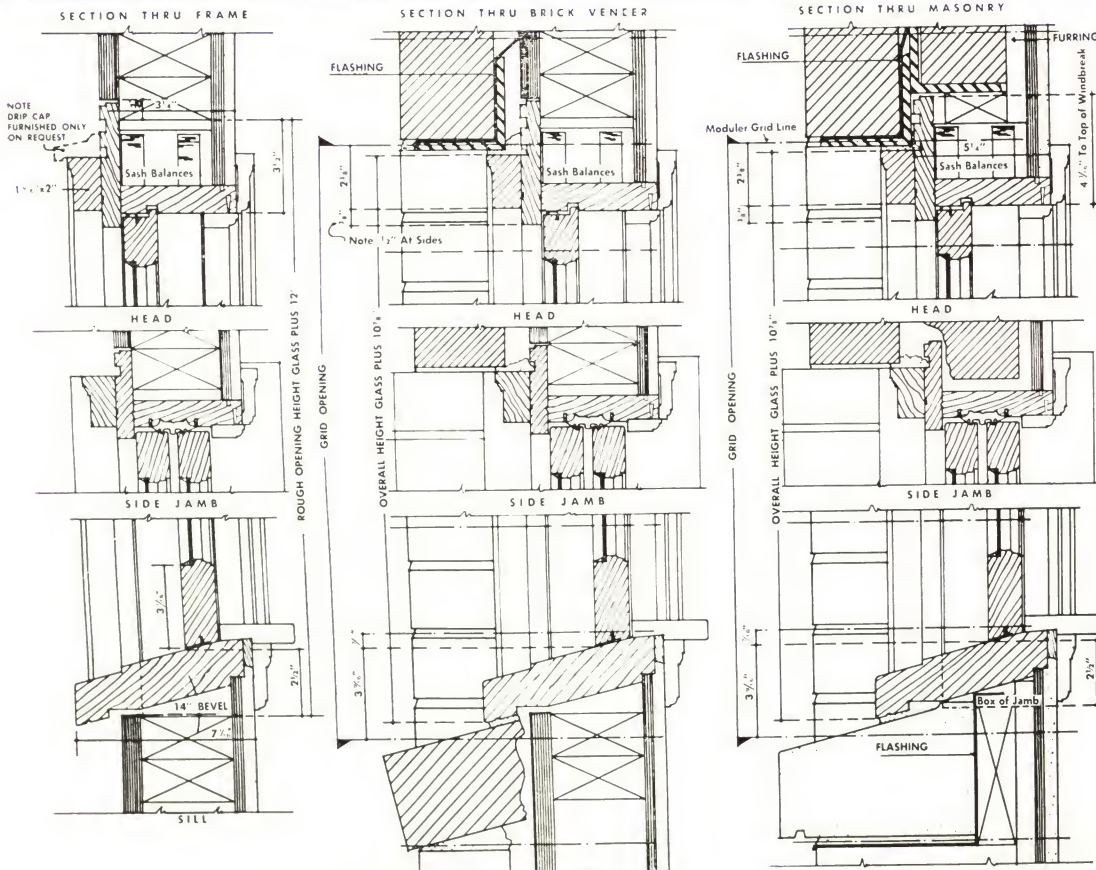
CARR, ADAMS & COLLIER COMPANY . Dubuque, Iowa

HERE ARE THE PRINCIPLE POINTS WHICH MAKE BILT-WELL DOUBLE-HUNG WINDOWS TODAY'S OUTSTANDING WINDOW UNITS!



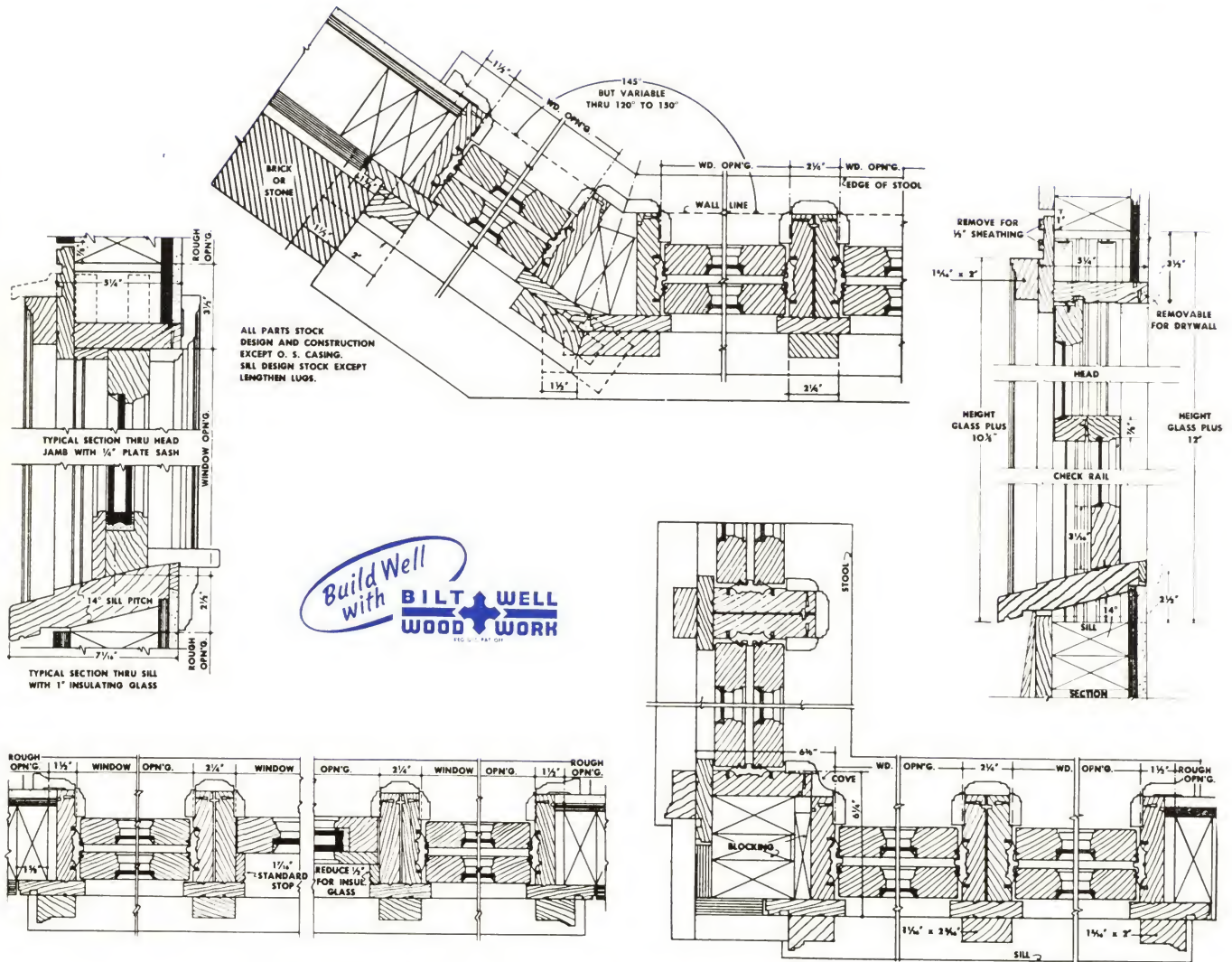
- 1** Patented flexible jamb-liner provides weathertightness and ease of operation. Its flexibility automatically compensates for dimensional variations due to climatic changes.
- 2** Designed for $\frac{3}{4}$ " plaster wall, yet may be easily converted for standard drywall by removing the exjamb.
- 3** Accurately machined and factory pre-fitted. Easy to assemble and simple to install in the wall.
- 4** Overhead spring balances provide finger-tip operation and perfect counter-balancing, allows sash to stay in any given position. Four balances to a unit, guaranteed for the life of the building.
- 5** Made of thoroughly seasoned kiln-dried Ponderosa Pine of uniform quality.
- 6** Wide overlapping one piece blind stop for easy nailing and weathertight installation. Adaptable to $\frac{3}{4}$ " or $\frac{1}{2}$ " sheathing.
- 7** Bilt-Well Windows meet rigid AWWI requirements for air-infiltration, proving to be twice as weathertight as that which is specified as a minimum.
- 8** Bilt-Well Windows are "water-repellent preservative treated" in strict accordance with approved NWMA standards.
- 9** Sturdily constructed with $1\frac{1}{8}$ " jambs and $1\frac{3}{4}$ " sills. Available knocked-down with all weather-strip applied at the factory.
- 10** Weathertight seals between sash and frame at head and sill, and between meeting rails of sash, make Bilt-Well Windows twice as weathertight, affording substantial fuel savings.
- 11** Sash is removable before inside stops are applied without having to remove weatherstrip. Important to builders and contractors.
- 12** Standardized for all conventional types of walls and construction.

STANDARDIZED FOR WOOD FRAME, BRICK VENEER AND SOLID MASONRY WALLS



CARR, ADAMS & COLLIER COMPANY . Dubuque, Iowa

INSTALLATION DETAILS OF BILT-WELL DOUBLE-HUNG WINDOW UNITS



DISTRIBUTORS OF BILT-WELL DOUBLE-HUNG WINDOW UNITS

ARKANSAS
Jonesboro—Carr-Adams Mfg. Company

COLORADO
Denver—Materials Supply Company

GEORGIA
Savannah—Neal-Blum Company

IDAHO
Boise—Intermountain Glass Co.

ILLINOIS
Chicago—C. L. Ibsen Company
Peoria—Carr & Johnston Company

INDIANA
Indianapolis—Adams-Rogers Company

IOWA
Des Moines—Carr & Moehl Company
Dubuque—Carr, Adams & Collier Co., Jobbing Division
Ft. Dodge—Carr & Moehl Company

KANSAS
Kansas City—R. L. Sweet Lumber Company

KENTUCKY
Lexington—Combs Lumber Company
Louisville—Byron Sash & Door Company

MARYLAND
Baltimore—The Sanders Company

MASSACHUSETTS
Framingham—Gregg & Son, Inc.

MICHIGAN
Grand Rapids—Grand Rapids Sash & Door Company

MINNESOTA
Minneapolis—Carr-Cullen Company

MISSOURI
St. Louis—Carr-Adams Mfg. Company

MONTANA
Great Falls—Lumber Yard Supply Company

NEBRASKA
Hastings—Adams & Kelly Company
Omaha—Adams & Kelly Company

NEW JERSEY
Gloucester City—J. R. Quigley Company, Inc.

NEW YORK
Albany—Concord Lumber Company, Inc.

Newburgh—Cameron Lumber Company, Inc.
Rochester—Concord Millwork Corporation

NORTH CAROLINA
Charlotte—Miller Mill Work Corporation

OHIO
Canton—The Interstate Sash & Door Company
Cleveland—Industrial Wholesale Lumber Company
National Sash & Door Company, Inc.
Mansfield—National Sash & Door Company, Inc.
Toledo—The Collier-Glasson Company
Youngstown—Youngstown Sash & Door Company

PENNSYLVANIA
Cressona—J. R. Quigley Company, Inc.
Harrisburg—J. R. Quigley Company, Inc.
Lancaster—J. R. Quigley Company, Inc.
Philadelphia—Lumber & Millwork Company of Philadelphia
J. R. Quigley Company
Pittsburgh—Georgia-Pacific Plywood Company

SOUTH DAKOTA
Rapid City—Robbins & Stearns

TENNESSEE
Knoxville—Tennessee Concrete & Supply Company
Nashville—The Tennessee Glass Company
Warren Brothers Company

TEXAS
Sweetwater—Sweetwater Sash & Door Company

UTAH
Salt Lake City—Knudsen Builders Supply Company

VIRGINIA
Norfolk—Building Supplies Corporation

WASHINGTON
Yakima—Cascade Lumber Company

WEST VIRGINIA
Bluefield—Bluefield Sash & Door Company, Inc.

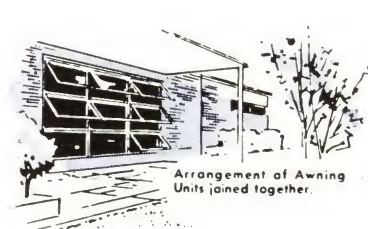
WISCONSIN
Oshkosh—Marquart Millwork Company

CARR, ADAMS & COLLIER COMPANY . Dubuque, Iowa

BILT-WELL AWNING WINDOWS for multiple use

Easy, simple operation, maximum weathertightness, scientific ventilation control and utmost flexibility of unit arrangement. Bilt-Well Awning Windows are complete units, assembled and ready to install. They are designed to offer utmost flexibility—1. they can be stacked vertically, 2. joined horizontally for ribbon windows, 3. reversed for hopper vents, 4. placed on end for casements, 5. installed to flank picture windows, 6. hopper vent under fixed sash—the very popular window wall, and 7. unlimited combinations of all the above arrange-

ments. In reality Bilt-Well Awning Window Units are “four-in-one” 1. Swing-out Awning Windows, 2. Swing-in Hopper Windows, 3. Swing-out Casements, and 4. Fixed Units. When used in any one of these ways, they give maximum operating efficiency at all times, without worry of complicated hardware to get out of order. The Bar Operator and the Friction slide hinge facilitates easy opening, smooth closing and positive locking without the necessity of opening the screen. Each Bilt-Well Awning Window has all hardware except locking handle installed at the factory, saving installation costs and to insure perfect alignment of hardware.



Arrangement of Awning Units joined together.



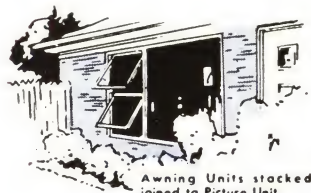
Picture Units can be placed end to end as well as over other Units.



Awning Units can be stacked over Hopper Units flanking Picture Unit.



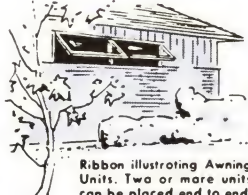
Flanking Casement Units with Picture Unit in center. Note: Bilt-Well Awning, Hopper, and Fixed Units can be grouped in any combination.



Awning Units stacked joined to Picture Unit.



Two Awning Units, or more, can be stacked one over the other.



Ribbon illustrating Awning Units. Two or more units can be placed end to end.



Awning Units become Casement when placed on end.



Single Casement Unit-Awning Unit placed on end.

“B” Unit—Bar Operator. Completely assembled furnished with hardware installed. Opens out easily with exclusive releasable bar operator without opening inside screen. (This same unit placed on end makes a bar operated casement unit).

“L” Unit—Locking Handle. Completely assembled furnished with all sash hardware installed except locking handle. Opens in with screen placed outside. (This same unit opening out with locking handle placed on reverse side makes an awning window, and on end opening out makes a casement window. Operation as awning or casement with locking handle requires lifting screen to open, therefore, bar operator unit is recommended for these applications).

“F” Unit—Fixed Unit. Unit supplied without operating hardware with sash fixed in frame. Wood frame or aluminum frame screens are available for all operating sash. Double Glazing Panels are available for all three awning window units—B, L and F.

Picture Unit. Made in six sizes—3 widths equal to units with 36, 39 and 44” glass, and two heights equal to two units with 18” or 22” glass stacked in height. Furnished K.D. carton packed including stops for glazing with 1/8” thick glass through 3/4” double thermal glass.

The Bilt-Well Awning Window Bar Operator Unit “B” is the **MOST ECONOMICAL** manually operated unit of all competitive units offered today.



“B” UNIT—BAR OPERATOR



“L” UNIT—LOCKING HANDLE



PICTURE UNIT



“F” UNIT—FIXED UNIT

CARR, ADAMS & COLLIER COMPANY
Dubuque, Iowa

BILT-WELL AWNING WINDOWS — PICTURE UNITS — STOCK UNITS

MATERIAL : Units and Exterior Trim Ponderosa Pine toxic water repellent treated to NWMA Standards. Jamb width $4\frac{3}{8}$ ", sash are $1\frac{3}{8}$ " thick.

GLAZING: Sash are clamp glazed with SSB glass. Removable bead allows reglazing when necessary. Double glazing panels SSB glass with aluminum surrounds and necessary hardware for attaching same is available for all units except picture unit. Picture unit can be glazed with $\frac{1}{8}$ " thick through, $\frac{3}{4}$ " insulating glass.

SCREENS: Wood screen is toxic water repellent treated and wired with aluminum cloth.

Aluminum framed screen is wired with aluminum cloth. Hangers and lock included.

WEATHERSTRIP: Sash completely weatherstripped with anodized special alloy aluminum.

HARDWARE: Friction slide hinge completely installed on operating units. Releasable bar operator, statuary bronze finish, completely installed. Locking handle statuary bronze finish, furnished complete with strikes and screws in envelope with instructions, carton packed.

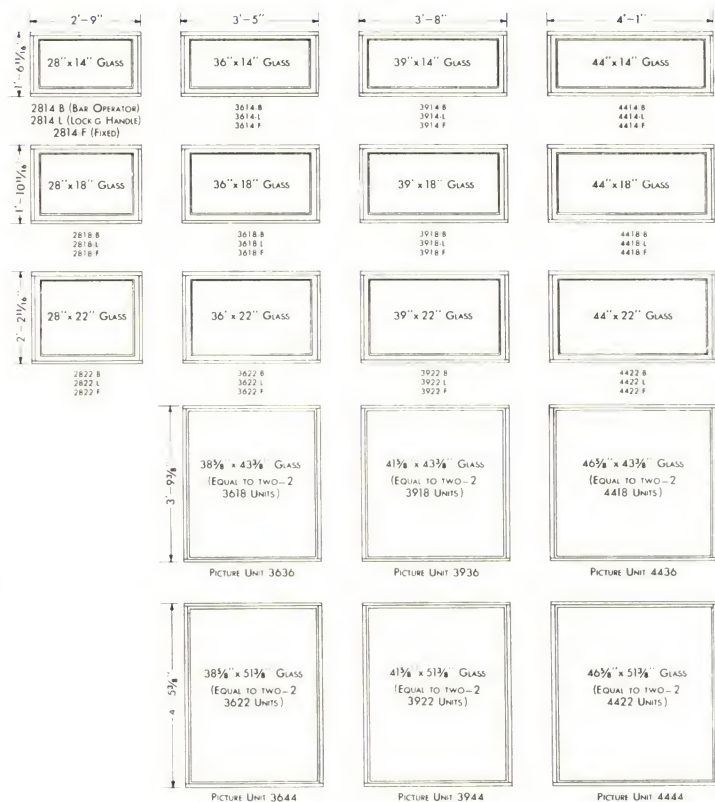
OPERATING AND FIXED UNITS: (set-up) Two of a size to a carton specify size and type B, L or F.

PICTURE UNITS: (K. D.) One to a carton specify size.

SCREENS: Twelve of a size to a carton. Specify size and type (wood or aluminum).

DOUBLE GLAZING PANELS: Six to a carton. Specify size.

TRIM: Bundled—not carton packed. Specify Size.



OVERALL MEASUREMENTS SHOWN DO NOT INCLUDE SUB SILL

BILT-WELL AWNING WINDOWS CAN BE COMBINED IN NUMEROUS WAYS

INSTALLATION

Groupings may be assembled into one unit, on a flat surface with outside face up. Corrugated nails may be used to fasten ends of head and sill of each unit together in groups of three high. Push units together and assemble into one unit using sub sill, brick mold and casing (mull casings extend from head brick mold to sub sill in one piece to permit easy fitting of transom casings). Check for plumb and square and block out and nail where necessary. Check for operation of movable vents, pack space between frame and wall with insulation and complete trim. Large grouping may be installed by first nailing sub sill in place, plumb in wall. Units may then be installed singly or in preassembled vertical groupings onto sub sill.

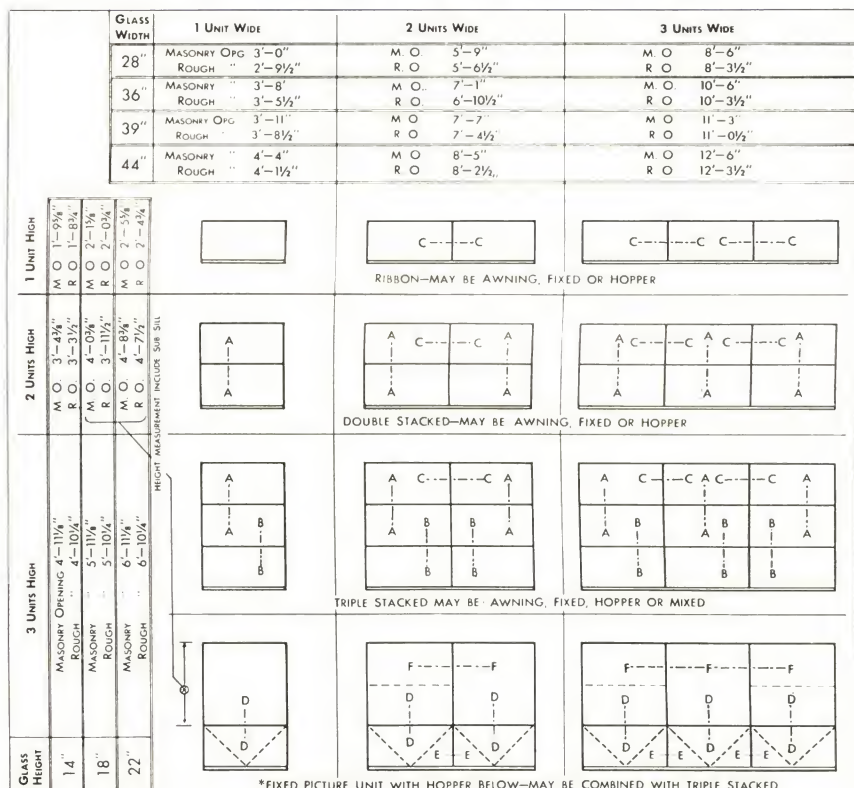
PAINTING—Lap paint onto glass $\frac{1}{16}$ ". Paint unit before installation in the wall, if at all possible. Keep paint off weatherstrip and hardware.

FOR EACH ADDITIONAL UNIT IN HEIGHT, ADD FOR 14" GLASS 1'-6 $\frac{3}{4}$ ", 18" GLASS 1'-10 $\frac{3}{4}$ ", 22" GLASS 2'-2 $\frac{3}{4}$ ".

FOR EACH ADDITIONAL UNIT IN WIDTH, ADD FOR 28" GLASS 2'-9", 36" GLASS 3'-5", 39" GLASS 3'-8", 44" GLASS 4'-1".

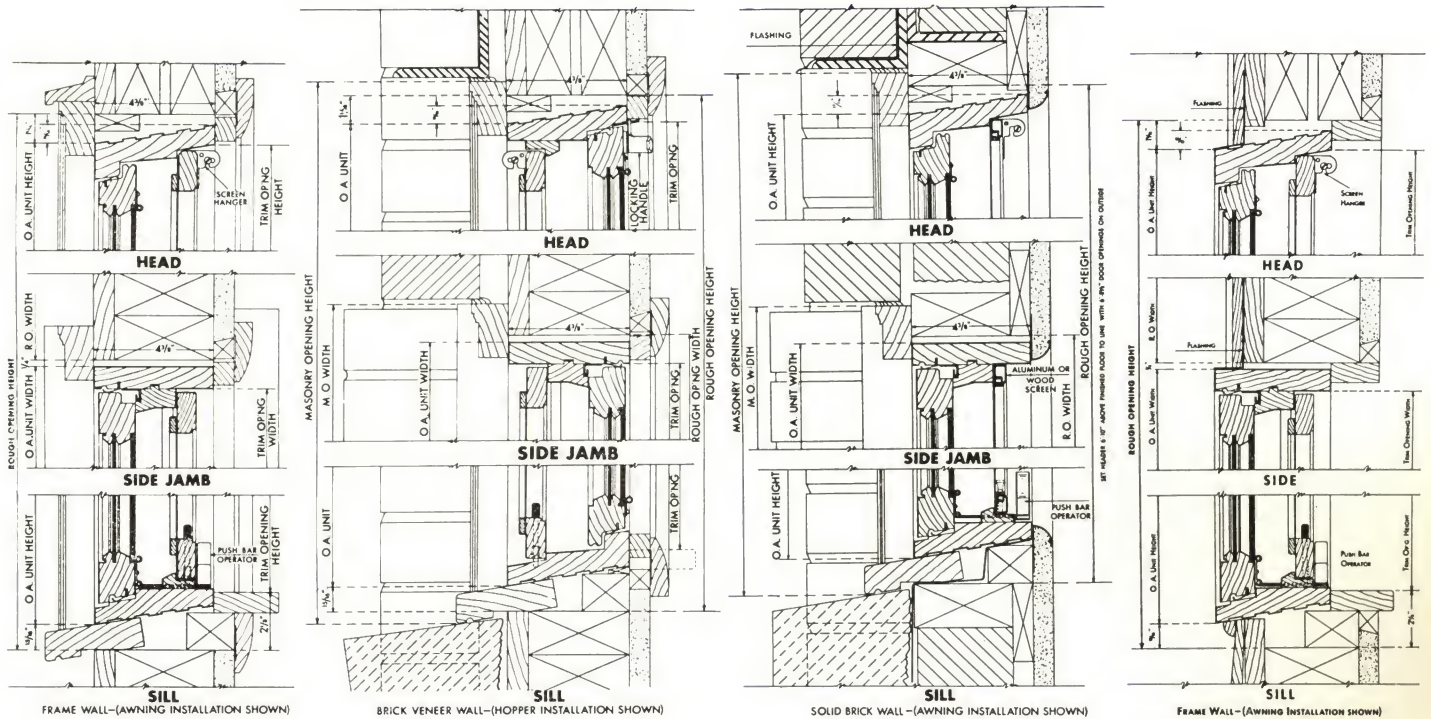
TO DETERMINE TRIM OPENINGS—SUBTRACT $3\frac{3}{4}$ " FROM R. O. HEIGHT— $2\frac{1}{8}$ " FROM R. O. WIDTH.

*NOTE: FIXED PICTURE UNITS ARE MADE IN 3 WIDTHS (36, 39 and 44" GLASS) AND 2 HEIGHTS EQUAL TO TWO UNITS 18" OR 22" STACKED.

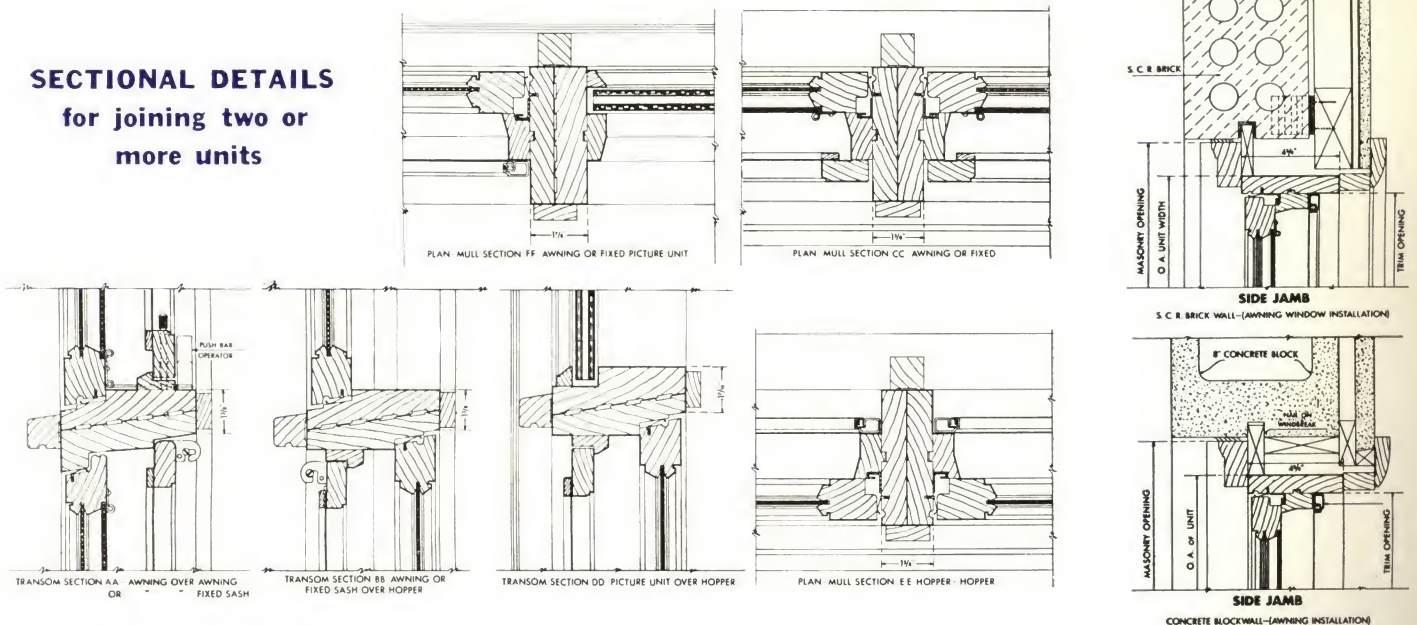


*FIXED PICTURE UNIT WITH HOPPER BELOW—MAY BE COMBINED WITH TRIPLE STACKED

ADAPTABLE TO ALL STANDARD WALL CONSTRUCTION



SECTIONAL DETAILS for joining two or more units

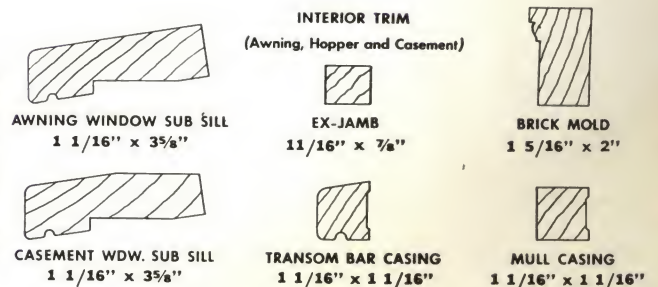


EXTERIOR AND INTERIOR TRIM Awning, Hopper and Casement



Exterior trim is chemically treated with a pentachlorophenol, toxic, water repellent solution. When cutting more than 3/4" from end of piece, it is recommended that ends be dipped in a toxic water repellent solution or painted with a white lead paint.

Note: Casing, Stool and Apron, furnished by others. Usually a Stock Stool can be used by reducing width.

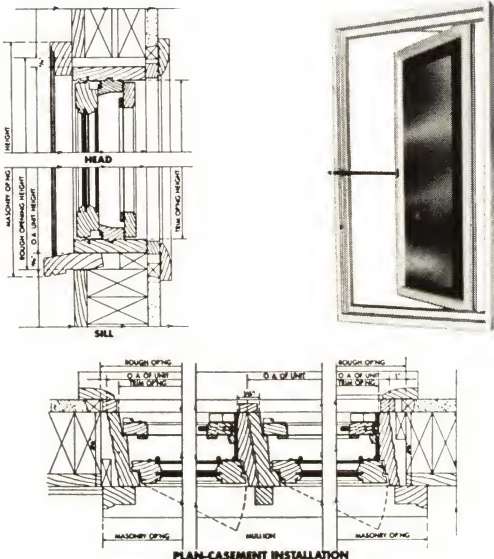


BILT-WELL AWNING UNITS

used as casements with
or without picture units

The bar operator unit or the locking handle unit placed on end can be used as a casement, opening out. The bar operator unit is preferred for casement use because the sash can be operated without moving the screen.

We recommend that bar operated casement units, in multiple combinations, be assembled to swing all left or all right to maintain uniform narrow mulls. Locking handle casement units must all hinge from left hand side as viewed from outside (shown on plan view) to place locking handle in proper operating position.



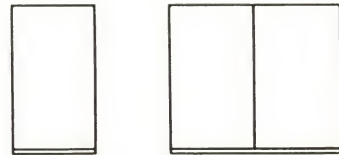
PLAN-CASEMENT INSTALLATION

REQUIRED WALL OPENINGS FOR INSTALLATION

CASEMENT UNITS

GLASS WIDTH	1 UNIT WIDE	2 UNITS WIDE	EACH ADDITIONAL UNIT WIDE—ADD
14"	MASONRY OP.G. 1'-9 3/8" ROUGH " 1'-8 1/8"	M. O. — 3'-4 1/8" R. O. — 3'-2 7/8"	M. O. — 1'-6 3/4" R. O. — "
18"	MASONRY " 2'-13 1/4" ROUGH " 2'-0 1/4"	M. O. — 4'-0 1/8" R. O. — 3'-10 1/8"	M. O. — 1'-10 3/4" R. O. — "
22"	MASONRY " 2'-5 3/8" ROUGH " 2'-4 1/8"	M. O. — 4'-8 1/8" R. O. — 4'-6 1/8"	M. O. — 2'-2 3/4" R. O. — "

CASEMENT UNIT HEIGHTS	GLASS HEIGHT
MASONRY OP.G. 2'-11 7/8" ROUGH " 2'-10 1/2"	28"
MASONRY OP.G. 3'-7 1/8" ROUGH " 3'-6 1/2"	36"
MASONRY OP.G. 3'-10 7/8" ROUGH " 3'-9 1/2"	39"
MASONRY OP.G. 4'-3 7/8" ROUGH " 4'-2 1/2"	44"



HEIGHT MEASUREMENTS INCLUDE SUB-SILL
TO DETERMINE TRIM OPENINGS SUBTRACT 2 3/4"
FROM R. O. WIDTH, 3 1/4" FROM R. O. HEIGHT

CASEMENT-PICTURE UNITS WIDTHS

SINGLE UNIT	PICTURE UNIT	SINGLE UNIT WITH CASEMENT EACH SIDE		
		3614-3914 OR 4414	3618-3918 OR 4418	3622-3922 OR 4422
MASONRY O. 4'-0"	3636 3936 4436	M. O. 7'-1 1/2" R. O. 7'-0 1/4"	M. O. 7'-9 1/2" R. O. 7'-8 1/4"	M. O. 8'-5 1/2" R. O. 8'-4 1/4"
MASONRY O. 4'-8"	3644 3944 4444	M. O. 7'-9 1/2" R. O. 7'-8 1/4"	M. O. 8'-5 1/2" R. O. 8'-4 1/4"	M. O. 9'-1 1/2" R. O. 9'-0 1/4"

SINGLE UNIT



HEIGHTS

CASEMENT UNIT HEIGHTS	GLASS HEIGHT
MASONRY OP.G. 3'-7 1/8" ROUGH " 3'-6 1/2"	3636 3644 3936 3944 4436 4444
MASONRY OP.G. 3'-10 7/8" ROUGH " 3'-9 1/2"	
MASONRY OP.G. 4'-3 7/8" ROUGH " 4'-2 1/2"	

SINGLE UNIT WITH CASEMENT EACH SIDE



HEIGHT MEASUREMENTS INCLUDE SUB-SILL
TO DETERMINE TRIM OPENINGS—SUBTRACT 2 3/4"
FROM R. O. WIDTH, 3 1/4" FROM R. O. HEIGHT.

DISTRIBUTORS OF CARR, ADAMS & COLLIER COMPANY BILT-WELL AWNING WINDOW UNITS

ARKANSAS

Jonesboro—Carr-Adams Manufacturing Company

CALIFORNIA

Sacramento—Lumber Products

COLORADO

Denver—Materials Supply Co.

DISTRICT OF COLUMBIA
Washington—Kern Distributing Co., Inc.

GEORGIA

Macon—Willingham Sash & Door Company
Savannah—Neal-Blum Company

IDAHO

Boise—Intermountain Glass Co.

ILLINOIS

Chicago—C. L. Ibsen Company
Peoria—Carr & Johnston Company

INDIANA

Indianapolis—Adams-Rogers Company

IOWA

Des Moines—Carr & Moehl Company
Dubuque—Carr, Adams & Collier Co., Jobbing Div.
Fort Dodge—Carr & Moehl Company

KANSAS

Kansas City—R. L. Sweet Lumber Company
Wichita—Wichita Building Material Company, Inc.

KENTUCKY

Louisville—Byron Sash & Door Company

LOUISIANA

New Orleans—Tulane Hardwood Lumber Company, Inc.

MARYLAND

Baltimore—Pacific Mutual Door Company
Bethesda—I. S. Turover

MICHIGAN

Detroit—C. L. Ibsen Company

MINNESOTA

Minneapolis—Carr-Cullen Company

MISSOURI

Joplin—Southwestern Sash & Door Company
Kansas City—Pacific Mutual Door Company
St. Louis—Carr-Adams Mfg. Company

MONTANA

Billings—Billings Sash & Door Company
Great Falls—Lumber Yard Supply Company

NEBRASKA

Hastings—Adams & Kelly Company
Omaha—Adams & Kelly Company

NEW JERSEY

Collingswood—V. G. Read Company, Inc.
Jersey City—Engler Millwork Corporation
South Kearny—C. R. Rudinger, Inc.

NEW YORK

Albany—Concord Lumber Co.
Newburgh—Cameron Lumber Company, Inc.
Queens Village—East Coast Millwork Company, Inc.
Rochester—Concord Millwork Corporation

NORTH CAROLINA

Charlotte—Miller Mill Work Corporation

OHIO

Canton—Interstate Sash & Door Company
Cleveland—Industrial Wholesale Lumber Co. & National Sash & Door Co.
Columbus—Throop-Martin Sash & Door Company
Mansfield—National Sash & Door Co., Inc.
Toledo—Collier-Glasson Co.
Youngstown—Youngstown Sash & Door Company

OKLAHOMA

McAlester—T. H. Rogers Lumber Company
Oklahoma City—Reints Sash & Door Company
Tulsa—Rounds & Porter Company

OREGON

Portland—Hawley Gilbert Company

SOUTH DAKOTA

Rapid City—Robbins & Stearns

TENNESSEE

Knoxville—Tennessee Concrete & Supply Co.
Nashville—Tennessee Glass Co. & Warren Bros. Co.

TEXAS

San Antonio—Stevens Sash & Door Company, Inc.
Sweetwater—Sweetwater Sash & Door Company
Waco—Frank Stevens Sash & Door Company

WASHINGTON

Yakima—Cascade Lumber Co.

WISCONSIN

Oshkosh—Marquart Millwork Co.

CARR, ADAMS & COLLIER COMPANY . Dubuque, Iowa